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10/649,903	08/26/2003	Maresh A. Ramchandani	5150-77400	5752

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EXAMINER
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MITCHELL, JASON D

ART UNIT	PAPER NUMBER
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2193

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/649,903

Applicant(s)

RAMCHANDANI, MAHESH A.

Examiner

Jason Mitchell

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 76-86, 88-107 and 109-114 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 76-86, 88-107 and 109-114 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 76-86, 88-107 and 109-114 are pending in this application.

#### ***Response to Arguments***

2. The Applicant's arguments on pg. 15 (1<sup>st</sup>-3<sup>rd</sup> full par.) fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

As the Applicant acknowledges col. 3, lines 12-22 of Grey "describes various components of the TestStand test executive software and their relationship with each other". Broadly speaking the elements are GUI elements and controls, and the relationships between them represent bindings. Accordingly, applicant's arguments are not persuasive and the rejection is maintained.

3. The Applicant asserts that Grey does not disclose the execution of a run-time operator interface application but instead, Grey relates to a user opening a sequence file and the TestStand engine determining whether types being loaded conflict with previously loaded/registered types.

The Examiner disagrees, the program allowing the user to open a sequence file constitutes a run-time operator interface application. Specifically, by definition it is performing it's functionality at run-time and is providing the user access to the functionality through a graphical user interface.

4. The Applicant asserts that Grey does not disclose executing the run-time operator interface application, wherein the run-time operator interface application executes to invoke execution of the test executive sequence" because the cited col. 7. lines 19-24 of Grey relates to execution of a process model and a process model is not a run-time operator interface application.

The Examiner disagrees. The Applicant has misconstrued the rejection. The 'process model' is analogous to the claimed test executive sequence and as discussed above, Grey's 'TestStand' program anticipates the run-time operator interface application.

5. Applicant's arguments with respect to claims 96-114 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 76-86, 88-107 and 109-114 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,401,220 to Grey et al. (Grey) in view of US 5,485,617 to Stutz et al. (Stutz)**

8. **Regarding Claim 76:** Grey discloses a computer-implemented method for displaying information regarding a test executive sequence, wherein the test executive sequence includes a plurality of steps, the method comprising:

including a GUI element in a graphical user interface of a run-time operator interface application, wherein the GUI element is operable to display information (Fig. 4 see the 'Main' tab, 'Step' column);

including a control in the run-time operator interface application, wherein the control includes pre-existing first functionality for determining the steps in the test executive sequence (col. 4, lines 4-5 "The TestStand Engine automatically determines the type being loaded");

configuring a binding between the GUI element and the control (col. 3, lines 16-18 "The sequence editor ... interface[s] to the test executive engine"), wherein configuring the binding enables the GUI element to automatically display at least a subset of the steps in the test executive sequence in response to the control determining the steps in the test executive sequence during execution of the run-time operator interface application (Fig. 4 see the 'Main' tab, 'Step' column); and

executing the run-time operator interface application, wherein said executing comprises the control executing to automatically determine the steps in the test executive sequence (col. 4, lines 4-5 "The TestStand Engine automatically determines the type being loaded"), wherein the binding between the GUI element and the control causes the GUI element to automatically display at least a subset of the steps in

response to the control determining the steps (Fig. 4 see the 'Main' tab, 'Step' column), wherein the GUI element displays the at least a subset of the steps in the graphical user interface of the run-time operator interface application during execution of the run-time operator interface application (Fig. 4 see the 'Main' tab, 'Step' column).

9. Grey does not disclose including the GUI element and control in the run-time operator interface in response to user input.

10. Stutz teaches that including GUI elements and controls in a run-time operator interface is done in response to user input (col. 10, lines 46-48 "specifies the visual components and their location on the display").

11. It would have been obvious to one of ordinary skill in the art at the time the invention was made to develop the run-time operator interface disclosed in Grey using the methods taught in Stutz (col. 10, lines 46-48) because Stutz provides "an improved method ... for dynamically generating object connections" (col. 8, lines 14-17).

12. **Regarding Claim 77:** The rejection of claim 76 is incorporated; further Grey discloses:

wherein the control also includes pre-existing functionality for formatting the at least a subset of the steps in the test executive sequence into a formatted list (col. 31,

lines 31-33 "specify a name, description, and comment for the step type. The user also can specify an icon and an module adapter");

wherein the GUI element automatically displaying the at least a subset of the steps comprises the GUI element automatically displaying the list of the at least a subset of the steps (Fig. 4 see the 'Main' tab, 'Step' column).

13. **Regarding Claim 78:** The rejection of claim 77 is incorporated; further Grey discloses:

wherein in performing said formatting the at least a subset of the steps in the test executive sequence into the formatted list, the control is operable to:

determine information regarding each of the at least a subset of the steps in the test executive sequence; and

format the information for display in the GUI element;

wherein the formatted list includes the formatted information for each of the steps in the at least a subset of the steps (Fig. 4, see 'Main' tab).

14. **Regarding Claim 79:** The rejection of claim 76 is incorporated; further Grey discloses:

wherein the test executive sequence is stored in a sequence file (col. 5, lines 53-54 "a test sequence file");

wherein in automatically determining the steps in the test executive sequence, the control is operable to automatically obtain information from the sequence file

regarding the test executive sequence and determine the steps based on the information obtained from the sequence file (col. 4, lines 1-5 "the user loads a file ... The TestStand Engine automatically determines the type being loaded").

15. **Regarding Claim 80:** The rejection of claim 76 is incorporated; further Grey discloses:

configuring the control in response to configuration user input after said including the control in the run-time operator interface application (col. 31, lines 31-33 "specify a name, description, and comment for the step type. The user also can specify an icon and an module adapter"), wherein the configuration user input specifies an appearance for the displayed steps, wherein configuring the control enables the control to cause the steps to be displayed in the GUI element with the specified appearance (Fig. 4, see 'Main' tab).

16. **Regarding Claim 81:** The rejection of claim 80 is incorporated; further Grey discloses:

wherein the configuration user input specifies one or more properties regarding a plurality of columns to display in the GUI element (col. 31, lines 31-33 "specify a name, description, and comment for the step type. The user also can specify an icon and an module adapter"); wherein configuring the control enables the control to cause information for each displayed step to be displayed in the GUI element in the plurality of columns according to the one or more specified properties (Fig. 4, see 'Main' tab).



17. **Regarding Claim 82:** The rejection of claim 76 is incorporated; further Grey discloses:

wherein the GUI element comprises a first GUI element;

wherein the method further comprises:

including a second GUI element in the run-time operator interface application in response to user input (col. 4, lines 4-5 "the user loading the file"; Note that those of ordinary skill in the art would have recognized this action is preformed through a GUI element.); and

configuring a binding between the second GUI element and the control (col. 3, lines 16-19 "the operator interface programs interface to the test executive engine");

wherein executing the run-time operator interface application comprises the second GUI element receiving user input during execution of the run-time operator interface application (col. 4, lines 4-5 "the user loading the file");

wherein the binding between the second GUI element and the control causes the control to automatically determine the steps in the test executive sequence in response to the user input received to the second GUI element during execution of the run-time operator interface application (col. 4, lines 4-5 "In response to the user loading the file, the TestStand Engine automatically determines the type being loaded");

wherein said configuring the binding between the first GUI element and the control enables the first GUI element to automatically display the at least a subset of the

steps in response to the user input received to the second GUI element during execution of the run-time operator interface application (Fig. 4 see the 'Main' tab, 'Step' column).

18. **Regarding Claim 83:** The rejection of claim 76 is incorporated; further Grey does not disclose including the control in the run-time operator interface application or that configuring the binding between the GUI elements removes a need for a user to create program code for providing these functionalities.

19. Stutz teaches including a control in the run-time operator interface application enables a user to configure the run-time operator interface application to perform a first functionality without requiring the user to create program code (col. 10, lines 42-45 "a list of predefined components (objects) that can be interconnected"); and

configuring a binding between a GUI element and the control enables the user to configure the run-time operator interface application to automatically display the results of said first functionality without requiring the user to create program code for displaying the results (col. 11, lines 5-11 "Using the various commands provided by the buttons in the command area 502").

20. **Regarding Claim 84:** The rejection of claim 76 is incorporated; further Grey discloses:

wherein the test executive sequence is operable to perform one or more tests on one or more units under test (UUTs) (col. 4, lines 47-48 "A sequence comprises a series of steps, wherein a step is typically a test preformed on an instrument.").

21. **Regarding Claim 85:** The rejection of claim 76 is incorporated; further Grey discloses:

wherein the test executive sequence is associated with a test executive environment (col. 13, lines 32-33 "The TestStand Test Executive Engine 220 is used for creating, editing, executing, and debugging sequences.");

wherein the control is operable to call the test executive environment during execution of the run-time operator interface application to determine the steps in the test executive sequence (col. 13, lines 39-41 "The user can call the Engine API from any programming environment").

22. **Regarding Claim 86:** The rejection of claim 76 is incorporated; further Grey discloses:

wherein the control comprises a software component constructed in accordance with an ActiveX<sup>™</sup> specification (col. 3, lines 30-33 "The TestStand Engine exports an ActiveX automation API").

**Regarding Claim 88:** The rejection of claim 76 is incorporated; further, while not explicitly stated, it is clear from Grey's disclosure that the control (col. 3, lines 30-33

"The TestStand Engine") does not appear on the graphical user interface of the run-time operator interface application during execution of the run-time operator interface application.

23. **Regarding Claim 89:** The rejection of claim 76 is incorporated; further Grey does not disclose the control is a pre-existing control provided by an application development environment.

24. Stutz teaches a pre-existing control provided by an application development environment (col. 10, lines 42-45 "a list of predefined components (objects) that can be interconnected").

25. **Regarding Claim 90:** The rejection of claim 89 is incorporated; further Grey does not explicitly disclose installing an application development environment on a computer system.

26. Stutz discloses both the application development environment and the control (col. 10, lines 42-45 "visual programming environment ... list of predefined components") "implemented on a computer system" (col. 9, lines 15-21). Accordingly, both the application development environment and the control must have been installed on the computer system

27. **Regarding Claim 92:** The rejection of claim 76 is incorporated; further Grey does not disclose the configuring the binding between the GUI element and the control comprises performing one or more calls during execution of the run-time operator interface application.

28. Stutz discloses said configuring the binding between the GUI element and the control comprises performing one or more calls to bind the GUI element to the control during execution of the test executive application (col. 15, lines 49-52 "The function `SetUpConnection` ... connects the appropriate notification interface").

29. **Regarding Claim 93:** The rejection of claim 76 is incorporated; further Grey does not disclose configuring the binding between the GUI element and the control is preformed in response to user input.

30. Stutz teaches configuring a binding between a GUI element and a control is performed in response to receiving user input to a graphical user interface to specify the binding between the GUI element and the control (col. 11, lines 5-11 "Using the various commands provided by the buttons in the command area 502").

31. **Claim 94** recites limitations similar to those addressed in the rejection of claim 76 with the exception that the claim is directed to a control and GUI element for respectively generating and displaying a report. (see Grey col. 8, lines 9-10 "The

TestStand Engine operates to automatically collect the results of each step in the sequence during execution"; col. 56, lines 48-50 "TestReport ... to generate the contents of the test report"; Fig. 50, see the 'Context' tab, 'ResultList' node; also see the 'Report' tab).

32. **Claim 95** recites limitations similar to those addressed in the rejection of claim 76 with the exception that the claim is directed to a control and GUI element for respectively generating and displaying an execution result. (see Grey col. 8, lines 9-10 "The TestStand Engine operates to automatically collect the results of each step in the sequence during execution"; col. 56, lines 48-50 "TestReport ... to generate the contents of the test report"; Fig. 50, see the 'Context' tab, 'ResultList' node; also see the 'Report' tab).

33. **Claim 96-112** recite limitations similar to those addressed in the rejections of claims 76-93 with the exception that the claims are directed to GUI element for receiving user input to cause a control to automatically invoke execution of a test executive sequence. (see Grey col. 23, lines 35-39 "start an execution ... by selecting the Run <SequenceName> item").

34. **Claim 113** recites limitations similar to those addressed in the rejection of claim 96 with the exception that the claim is directed to a GUI element for receiving user input to cause a control to automatically invoke execution of a test executive sequence. (see

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Grey col. 24, lines 1-4 "The menus ... have commands that allow the user to stop execution").

35. **Claim 114** recites limitations similar to those addressed in the rejection of claim 76 with the exception that the claim is directed to first and second GUI elements and a control wherein the control opens a dialog box to allow a user to select a test executive sequence in response to user input received to the first GUI element (Fig. 30, see the text box labeled "File Pathname" containing the text "ComputerCPU.seq"), and wherein the second GUI element automatically displays the steps in the test executive sequence (Fig. 4 see the 'Main' tab, 'Step' column).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is (571) 272-3728. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason Mitchell/  
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9/13/07

  
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